

PRIVATE IMPROVEMENT

DESIGN CRITERIA

DC7-001 GENERAL Private improvement construction in the City of Gardner shall in all respects be designed to conform to applicable codes, regulations and ordinances as established by the City of Gardner. Plans for private improvements being made in conjunction with building construction shall be submitted through the Community Development Department. All street, roadway, driveway, and sidewalk construction, public or private, shall conform to the technical specifications and design criteria for public improvements as stipulated herein.

Private improvements that are not being constructed in conjunction with new building construction or an addition to an existing building shall submit plans to the Engineering Department for review and approval. Improvements for water line, sanitary sewer line, storm sewer line and street construction shall conform to the design criteria of the City of Gardner and/or the applicable sections of the adopted building codes.

DC7-002 PARKING LOT CONSTRUCTION Parking lot construction shall conform to the following design criteria and shall abide by all City of Gardner ordinances.

A. Materials for Construction. The following materials are acceptable for parking lot construction in the City of Gardner:

1. Pavement. The pavement cross-section shall consist of full depth asphaltic concrete (minimum of four inches) over a crushed rock base (minimum of six inches), or portland cement concrete pavement (minimum of five inches) with 10 gauge welded wire mesh on six (6) inch centers each way embedded two (2) inches from the bottom surface of the slab.
2. Driveway Entrances and Curbing Within Public Right-of-Way. These items shall meet the requirements of Section 1400, 2000, and 2100 of the Technical Specifications of the City of Gardner. They will be constructed of Class II air-entrained concrete.
3. Curbing. Parking lot curb shall be of 4000 psi air-entrained concrete.

B. Curb and Curb and Gutter. Concrete curbing shall be provided along the perimeter of parking areas and along drives connecting parking areas with public streets. Curbing shall have a six-inch vertical face above the surface of the pavement. Curbs shall be constructed as cast-in-place. In areas of the lot adjacent to proposed future expansion, asphaltic concrete curb may be used if approved by the City Engineer. The proposed future expansion shall be shown on the plans.

All work within public right-of-way shall conform to applicable City of Gardner standards. Driveway approaches shall be constructed with integral curb and gutter conforming to City of Gardner Type "B" curb and gutter. Transition to existing curb and gutter shall be made at saw joints in existing curb or at existing expansion joints. Construction and expansion joints, dimensions, elevations and surface finish shall match as closely as possible to that of existing adjacent curb and gutter. Expansion joints shall be placed where new curbing abuts existing curbing.

- C. Drainage Facilities. All parking areas shall be provided with adequate drainage facilities as approved by the City Engineer. Enclosed storm sewers shall be used to collect and convey drainage on, across and through public right-of-way. All effort will be made, within the limits of the existing topography, to prevent stormwater runoff from parking lots from exiting through driveway entrances. If the design engineer can justify the need for stormwater to exit through a drive entrance, the maximum flow of water allowed shall be governed by the design criteria for storm drainage facilities for the City of Gardner and APWA 5600. If the flow is in excess of the gutter capacity then it must all be picked up by a curb inlet prior to entering public right-of-way.

A Stormwater Management Plan shall be submitted to the City Engineer for review and approval in accordance with the Design Criteria for Storm Drainage Facilities of the City of Gardner. Drainage structures located in the public right-of-way used and constructed as a portion of the storm drainage facilities for parking lots shall be in accordance with the Technical Specifications of the City of Gardner.

- D. Driveway Entrances. All commercial driveway entrances constructed within the public right-of-way shall be constructed of concrete with a minimum thickness of seven inches (7") (see detail in Section 2100). Each commercial or industrial property shall be allowed at least one driveway approach but may have more as long as the total maximum summation of the widths of all driveway approaches upon the property does not exceed 20 percent (20%) of the length of the real property that fronts the abutting city street subject to approval by the City Engineer. Should more than one driveway approach be desired, there shall not be less than 90 feet between the center lines of each driveway approach. Final layout of driveway approaches is subject to approval by the City Engineer. In addition to the above, the following dimensions shall govern construction of driveway approaches:

1. Width of Driveway Approach

- a Commercial Driveway Approach - The width of commercial driveway approaches shall not exceed 35 feet or be less than 25 feet measured parallel to the center line of the street at the property lines for two-way driveway approaches; provided, however, that commercial property may be allowed to have a driveway approach not exceeding 52 feet, if said driveway approach does not exceed 20 percent of the length of the real property abutting the adjacent city street and a four foot raised median is placed within such driveway

approach to divide the entrance and exit lane(s). The minimum width of a one-way driveway shall be 20 feet.

- b Industrial Driveway Approach. The width of industrial driveway approaches shall not exceed 65 feet or be less than 25 feet measured parallel to the center line of the street at the property lines for two-way approaches; provided that the minimum width for a one-way driveway shall be 16 feet.

2. Corner of Adjacent Property Line Offset.

Commercial or Industrial Driveway Approaches. When commercial or industrial driveway approaches are located at or near a street intersection, in no case shall the distance from the property corner at the intersection be less than 75 feet to the near line of the nearest driveway approach, as extended to the street curb or pavement edge.

No commercial or industrial driveway approach shall be constructed having a tangent length between the curb return and the property line extended, of less than 12-1/2 feet.

- 3. Driveway Offset. Either center lines of opposing driveways shall align, or shall be offset no less than 75 feet. This condition shall not apply where a permanent median exists without break for these driveways.

4. Turning Radii.

- a Commercial Driveways. Commercial driveway approaches shall have a minimum radii of 15 feet.
- b Industrial Driveways. Industrial driveway approaches shall have a minimum radii of 25 feet. When a private improvement is determined to serve trucks with longer wheelbases, the city engineer may require a greater minimum radii for driveway approaches.
- c Common Driveways. Driveways that are shared by adjacent property owners require that a common driveway (ingress/egress) easement be filed and on record at the County Register of Deeds office.

- E. Construction on Public Right-of-Way Under State Jurisdiction or Control. All construction within right-of-way under the control or jurisdiction of the state of Kansas shall be reviewed and approved by the appropriate state agency prior to submittal of the plans to the City of Gardner. Plans submitted to the City of Gardner for review shall reflect all changes or corrections as required by that state agency and also outlined on the approved state permit.